

RESOLUTE
ENVIRONMENTAL LLC

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February 8, 2013

BUREAU OF AIR QUALITY

Ms. Elizabeth J. Basil
South Carolina Department of Health and Environmental Control
2600 Bull Street
Columbia, South Carolina 29201

Re: AVX Draft Title V - Additional Information
AVX, Horry County, Myrtle Beach, SC
TV-1340-0002

Dear Ms. Basil:

On January 3, 2013, Resolute Environmental, LLC on behalf of the AVX Corporation (AVX) Myrtle Beach, SC, facility submitted comments to the South Carolina Department of Health and Environmental Control (DHEC) following review of the facility's working draft Title V permit. Resolute Environmental had a subsequent telephone conversation with Ms. Fatina Washburn Clark of DHEC regarding additional information needed to incorporate the comments provided by AVX into the draft permit. The following list the attachments to this letter providing the requested information:

- Attachment 1 - Draft Title V Permit Attachment D Table
- Attachment 2 - Revised Form G
- Attachment 3 - Revised CAM Plan
- Attachment 4 - Completed Daily Observation Sheet

If you have any questions or need additional information, please call me at (919) 701-0009.

Sincerely,

RESOLUTE ENVIRONMENTAL, LLC



Gary T. Yoder
Principal

Ec
Larry Blue - AVX Corp.
Ralph Bryant - AVX Corp.
Max Justice - Parker Poe

Encl

ATTACHMENT 1
Draft Title V Permit - Attachment D Table

Attachment D Table Information

The following is a duplication of the Attachment D table requesting information on dates and the Thin Film Process scrubber P operational range. Please note that the lower operational range for the adsorption unit ΔP has been revised from 2" to 1.0" based on previous communications and approval by DHEC.

Working Draft Title V Permit – Attachment D

CONTROL DEVICE PERFORMANCE INDICATORS AND OPERATIONAL RANGES					
Control Device ID	Pollutant Controlled	Applicable Requirement (Special permit limitations, fuel info, different capture systems, etc.)	Parameter Monitored, Performance Indicator, etc.	Operational Range	Date
CD-AD-1 CD-AD-2 CD-AD-3	VOC	SC Regulation 61-62.5, Std 3 SC Regulation 61-62.63, Subparts A&B 40 CFR Part 63, Subparts A&B	Adsorption Unit ΔP	1.0"-5.0" H ₂ O	1998
CD-AD-1 CD-AD-2 CD-AD-3	VOC	SC Regulation 61-62.5, Std 3 SC Regulation 61-62.63, Subparts A&B 40 CFR Part 63, Subparts A&B	Desorption Unit Temperature	350°F-650°F	1998 REV 2011
CD-TO-1	VOC	SC Regulation 61-62.5, Std 3 SC Regulation 61-62.63, Subparts A&B 40 CFR Part 63, Subparts A&B	Thermal Oxidizer Unit Temperature	1400°F- 1800°F	1998
CD-DC-A CD-DC-B CD-DC-C	PM PM ₁₀ PM _{2.5}	SC Regulation 61-62.5, Std 4	Dust Collector ΔP	1.0"-5.0" H ₂ O	1986
CD-MB-2	PM PM ₁₀ PM _{2.5}	SC Regulation 61-62.5, Std 4	Baghouse ΔP	1.0"-5.0" H ₂ O	1998
CD-TFS	PM PM ₁₀ PM _{2.5} VOCs HAPs	SC Regulation 61-62.5, Std 4 SC Regulation 61-62.1, Section II(E)	Thin Film Scrubber Liquid pH	6.0-13.0 pH	2002
CD-TFS	PM PM ₁₀ PM _{2.5} VOCs HAPs	SC Regulation 61-62.5, Std 4 SC Regulation 61-62.1, Section II(E)	Thin Film Scrubber ΔP	1.0"-3.0" H ₂ O	2002

Attachment 2
Revised Form G



**Title V Permit Application
Insignificant Activity Equipment- Form G
Bureau of Air Quality
Page 1 of 3**

Please Refer to Instruction / Definitions Pages Before Completing This Form

1. Insignificant Activity (IA) Unit ID:	2. Insignificant Activity Unit ID Description	3. Construction Permit ID or Approval Date (if applicable):	4. On SC Insignificant Activity List (Yes or No)	5. Pollutant(s)	6. Emission Rate (Uncontrolled)	7. Deminimis Rate
RMMDO	12 drying ovens to remove moisture and detergent/dispersant (Unit 14) [Rev Feb. 2013]		No	PM/PM10/PM2.5	Less than 5 tpy	< 5 tpy criteria pollutants
RMIMTS	2 tape shredders (Unit 14)		No	PM/PM10/PM2.5	Less than 5 tpy	< 5 tpy criteria pollutants
RMMOV	1 Oven for moisture removal in test & dev. (Unit 14) [Rev Feb. 2013]		Yes	N/A	N/A	Sec. A, 12
RMMRTF	2 rapid temperature furnaces in T&D [Rev Feb. 2013]		No	N/A	N/A	Sec. A, 12
RMMTDP	Testing & dev. Priller (Unit 14)		Yes	N/A	N/A	Sec. A, 12
RMMKILN	4 Small rotary kilns (Unit 14)		No	PM/PM10/PM2.5	Less than 5 tpy	< 5 tpy criteria pollutants
RMMSPX	3 Mixers in test & dev. (Unit 14)		No	N/A	N/A	Sec. A, 12
RMMVK	46 Vertical calcining kilns		Rev 12/09/11: Kilns decommissioned			
RMMTG	Transguard process (Unit 14)	2007	No	PM/PM10/PM2.5	Less than 5 tpy	< 5 tpy criteria pollutants
BOACT	Bioact cleaning system (Unit 15)		No	VOC	Less than 5 tpy	< 5 tpy criteria pollutants
SFH	Fume Hood (laboratory hoods) (Unit 15)		Yes	N/A	N/A	Sec. A, 12
SO	QC lab oven (Unit 15)		Yes	N/A	N/A	Sec. A, 12
SBM	3 Bead mixers (Unit 15) [Rev Feb. 2013]		No	VOC	Less than 5 tpy	< 5 tpy criteria pollutants
MFP	2 Filter Presses (Unit 16)		No	VOC	Less than 5 tpy	< 5 tpy criteria pollutants
MPS	Pot storage room exhaust (Unit 16)		No	VOC	Less than 5 tpy	< 5 tpy criteria pollutants
MFH	2 Fume Hoods (laboratory hoods) (Unit 16)		Yes	N/A	N/A	Sec. A, 12
MSW	2 Solvent-wash sinks (Unit 16)		Rev 12/09/11: Removed since solvent wash sinks are not in this department			
MO	Lab oven (Unit 16)		Yes	N/A	N/A	Sec. A, 12
MRTF	3 Rapid temperature furnaces (Unit 16) [Rev Feb. 2013]		Yes	N/A	N/A	Sec. A, 12



**Title V Permit Application
Insignificant Activity Equipment- Form G
Bureau of Air Quality
Page 2 of 3**

1. Insignificant Activity (IA) Unit ID:	2. Insignificant Activity Unit ID Description	3. Construction Permit ID or Approval Date (if applicable):	4. On SC Insignificant Activity List (Yes or No)	5. Pollutant(s)	6. Emission Rate (Uncontrolled)	7. Deminimis Rate
CSR	Screen Room (Unit 17)		No	VOC	Less than 5 tpy	< 5 tpy criteria pollutants
CSWS	3 Solvent wash stations (Unit 17)		No	VOC	Less than 5 tpy	< 5 tpy criteria pollutants
BO	30 Ovens for chip binder burnout (Unit 18) [Rev Feb. 2013]		No	VOC	Less than 5 tpy	< 5 tpy criteria pollutants
CSO	11 Low temperature ovens for moisture removal (Unit 18) [Rev Feb. 2013]		No	PM/VOC	Less than 5 tpy	< 5 tpy criteria pollutants
CSTR	1 Thermal release oven for paper removal (Unit 18)		No	PM/VOC	Less than 5 tpy	< 5 tpy criteria pollutants
CSPA	2 Paper applicator machines (Unit 18)		No	VOC	Less than 5 tpy	< 5 tpy criteria pollutants
CSCD	2 Low temperature chip dryers (Unit 18)		No	PM/VOC	Less than 5 tpy	< 5 tpy criteria pollutants
CSCS	Blade cleaning station (Unit 18)		No	VOC	Less than 5 tpy	< 5 tpy criteria pollutants
FK	20 Firing Kilns (Unit 18)		No	VOC	Less than 5 tpy	< 5 tpy criteria pollutants
CSGI	Gold immersion hood (Unit 18) [Rev Feb. 2013]		No	PM	Less than 5 tpy	< 5 tpy criteria pollutants
TL	5 Labeling lasers (Unit 19)		No	PM/VOC	Less than 5 tpy	< 5 tpy criteria pollutants
TSW	4 Solvent wash stations (Unit 19) [Rev Feb. 2013]		No	VOC	Less than 5 tpy	< 5 tpy criteria pollutants
SBE	3 Non-head SBE plating lines (Unit 19)	October 2007	No	PM/VOC	Less than 5 tpy	< 5 tpy criteria pollutants
BCB	BCB coating process (Unit 19)	September 2007	No	PM/VOC	Less than 5 tpy	< 5 tpy criteria pollutants
CPS	Copper Plating System (Unit 19) [Rev Feb. 2013]		No	PM/VOC	Less than 5 tpy	< 5 tpy criteria pollutants
GPL	1 Manual gold plating line (Unit 19)		No	PM	Less than 5 tpy	< 5 tpy criteria pollutants
PDD	6 Plating dryers for moisture removal (Unit 19) [Rev Feb. 2013]		No	PM/VOC	Less than 5 tpy	< 5 tpy criteria pollutants
PDO	1 Plate drying oven for moisture removal (Unit 19)		No	PM	Less than 5 tpy	< 5 tpy criteria pollutants



**Title V Permit Application
Insignificant Activity Equipment- Form G
Bureau of Air Quality
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1. Insignificant Activity (IA) Unit ID:	2. Insignificant Activity Unit ID Description	3. Construction Permit ID or Approval Date (if applicable):	4. On SC Insignificant Activity List (Yes or No)	5. Pollutant(s)	6. Emission Rate (Uncontrolled)	7. Deminimis Rate
CO	1 Copper coupon oven (Unit 19)		No	PM/VOC	Less than 5 tpy	< 5 tpy criteria pollutants
TFCS	Chipstar Terminating Oven (Unit 20) [Rev Feb. 2013]	October 2011	No	VOC	Less than 5 tpy	< 5 tpy criteria pollutants
TFQS	Quicksilver Terminating Machine (Unit 20) [Rev Feb. 2013]	February 2013	No	VOC	Less than 5 tpy	< 5 tpy criteria pollutants
DFP	87 BHp Diesel Fire Pump (Unit 21)		Yes	N/A	N/A	Sec. B, 4
E1	100 kW emergency generator		Yes	N/A	N/A	Sec. B, 2a
E5	260 kW emergency generator					
Removed from site [Rev Feb. 2013]						
E6	600 kW emergency generator		Yes	N/A	N/A	Sec. B, 2b
E7	565 kW emergency generator		Yes	N/A	N/A	Sec. B, 2b
B1	0.392 MMBtu/hr Plating Bath Boiler (Unit 21)		Yes	N/A	NA	Sec. B, 1.b
B2	0.392 MMBtu/hr Plating Bath Boiler (Unit 21)		Yes	N/A	NA	Sec. B, 1.b
B3	0.779 MMBtu/hr Plating Bath Boiler (Unit 21)		Yes	N/A	NA	Sec. B, 1.b
CT1	Cooling tower 1		Yes	N/A	NA	Sec. A, 20
CTA	Cooling tower 2A		Yes	N/A	NA	Sec. A, 20
CTC	Cooling tower 2C		Yes	N/A	NA	Sec. A, 20
DPA	Lot quality DPA hood		Yes	N/A	N/A	Sec. A, 13
LQO	Lot quality drying ovens		Yes	N/A	N/A	Sec. A, 13

Attachment 3
Revised CAM Plan

**Compliance Assurance Monitoring Plan
(Revised)**

**VOC Control by Adsorber/Desorber and Thermal Oxidizer
for 24 CMAP Build Up Machines**

**AVX Corporation
Myrtle Beach, South Carolina**

Air Permit No. TV-1340-0002

Prepared For:

AVX Corporation
801 17th Avenue South
Myrtle Beach, South Carolina 29578

Prepared By:

Resolute Environmental, LLC
114 Oak Fern Lane
Willow Spring, North Carolina 27592

February 2013

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1. INTRODUCTION

The AVX Corporation (AVX) owns and operates an electronic capacitor manufacturing facility in Myrtle Beach, South Carolina. Operations at AVX include Raw Materials Manufacturing (RMM), Slip Manufacturing, Metals Department, CMAP Buildup, CMAP Support, Kiln Room, Metallization Department and other supporting processes.

AVX currently operates all emission sources under Title V Permit No. TV-1340-0002 issued by the South Carolina Department of Health and Environmental Control (DHEC) and is in the process of renewing this operating permit. Under USEPA regulations promulgated at 40 CFR 64, a facility must submit a Compliance Assurance Monitoring Plan (CAM Plan) for all affected sources at the time of renewal of its initial Title V permit. The regulations under 40 CFR 64 are commonly referred to as the CAM Rule. This CAM Plan is being submitted in compliance with the requirements specified in 40 CFR 64.

II. CAM Rule

The CAM rule applies to pollutant specific emission units (PSEU) located at a major source that meet all of the following criteria:

- a. The PSEU is subject to an emission limit or standard, and
- b. The PSEU uses a control device to achieve compliance, and
- c. Potential pre-control emissions from the PSEU are equal to or exceed 100% of the major source threshold.

The major source thresholds are 100 tons/yr of criteria pollutants (including PM and SO₂), 25 tons/yr of total hazardous air pollutants (HAPs), and 10 tons/yr of a single HAP.

The CAM rule requires facilities to design and implement CAM Plans for affected PSEU to assure that control devices are maintained and operated at levels that will result in compliance with the emission limits. Owners are required to:

- select representative parameters upon which compliance can be assured,
- establish indicator ranges (or procedures for setting indicator ranges) for the parameters,
- use performance testing or other information to verify the parameters and ranges, and
- correct control device performance problems as expeditiously as practicable.

The CAM Plan must:

- a. Describe the indicators to be monitored and how they are to be measured;
- b. Describe the indicator ranges or the process by which the indicators are to be established;
- c. Describe the performance criteria for the monitoring approach, including
 - specifications for obtaining representative data
 - quality assurance and control procedures
 - monitoring frequency
 - data collection procedures
 - data averaging period;
- d. Provide a justification for the proposed elements of the monitoring;
- e. Provide historical monitoring data, emissions test data and control device operating data recorded during performance tests, if necessary;

Provide an implementation plan, if monitoring requires installation, testing, or other activities prior to installation.

III. Affected Units

The CMAP build up process is the only source at AVX with potential CAM Rule applicability. It has an uncontrolled, potential volatile organic compound (VOC) emission rate of 116 ton/yr, which is greater than the major source threshold and uses three adsorber/desorbers and thermal oxidizer abatement system to control VOC emissions. The current Title V permit limits VOC emissions from the building that includes CMAP build up to 39.5 ton/yr to avoid Prevention of Significant Deterioration applicability (S.C. Regulation 61-62.5, Section H – Synthetic Minor Plant

Permits). With significant operational and emission reduction changes at AVX, removal of this emission limitation has been requested in the Title V renewal application. The only other emission limitation applicable to CMAP build up equipment is S.C. Regulation 61-62.5, Standard 4, Section IX requiring 20% or less opacity. S.C. 61-62.5, Standard 3, Section III (Waste Combustion and Reduction) limits the thermal oxidizer particulate matter emissions to 0.5 lb/MMBtu and opacity to 20%, except during periods of startup and shut down (Item I, Industrial Incinerators). Operating the source and control equipment consistent with good air pollution control practices will result in meeting the requirements of Standard 3. To summarize, with removal of 39.5 ton/yr VOC emission limit, CAM Rule applicability items a. and b. above do not apply to CMAP build up, and therefore a CAM Plan is not required. However, with AVX's continued commitment to reducing environmental impacts, the VOC abatement system will continue to be operated by AVX. This Plan is submitted as part of that commitment to demonstrate that the adsorber/desorbers and thermal oxidizer will be operated in accordance with the parametric monitoring requirements of the operating permit.

IV. COMPLIANCE ASSURANCE MONITORING PLAN CMAP BUILD UP VOC EMISSIONS CONTROLLED BY AN ADSORBER/DESORBER AND THERMAL OXIDIZER

1. Background

CMAP machines are tools used by AVX to manufacture capacitor chips of varying sizes using ceramic and electrode ink raw materials. The raw materials emit VOCs which are captured by 24 CMAP machines that deliver the compounds to the emission abatement system. The control system includes three adsorber/desorbers that are connected in parallel to concentrate the organics in the air stream, which is delivered to a 1 MMBtu/hr thermal oxidizer (TO-1) for destruction. A set of eight (8) CMAP machines are connected to one 5,000 cfm adsorber/desorber (AD-1). Another set of 4 CMAP machines are connected to a separate 5,000 cfm adsorber/desorber (AD-2) and 12 machines are connected to a 14,000 cfm adsorber/desorber (AD-3).

2. Process Design

Process air from the CMAP machines enters the bottom of the adsorber and is directed upward through a series of sieve trays fluidizing beaded activated carbon (BAC) on the trays. The counter-current contact of process gas and carbon removes solvent vapors from the air stream. Spent carbon from the last tray collects in the adsorption bottom before it is pneumatically transported to the top of the desorber. The BAC flows down through the desorber as a moving bed. It passes through a ceramic heated zone in which the concentrated solvent is desorbed from the BAC. The highly concentrated VOC stream is then delivered to the thermal oxidizer to be burned.

3. Applicable Emission Limits and Standards

The CMAP build up process is the only source at AVX with potential CAM Rule applicability. It has an uncontrolled, potential volatile organic compound (VOC) emission rate of 116 ton/yr, which is greater than the major source threshold and uses three adsorber/desorbers and thermal oxidizer abatement system to control VOC emissions. The current Title V permit limits VOC emissions from the building that includes CMAP build up to 39.5 ton/yr to avoid Prevention of Significant Deterioration applicability (S.C. Regulation 61-62.5, Section H – Synthetic Minor Plant Permits). With significant operational and emission reduction changes at AVX, removal of this

emission limitation has been requested in the Title V renewal application. With removal of 39.5 ton/yr VOC emission limit, the CAM Rule does not apply because the air pollution control system will not be used to meet an applicable standard. However, with AVX's continued commitment to reducing environmental impacts, the VOC abatement system will continue to be operated by AVX. This Plan is submitted as part of that commitment to demonstrate that the adsorber/desorbers and thermal oxidizer will be operated in accordance with the parametric monitoring requirements of the operating permit.

4. Rationale for Selection of Performance Indicator

S.C. Regulation 61-62.5, Standard 3, Section III, Item I is applicable to the thermal oxidizer and limits emissions from the unit to 20% opacity (except during periods of start up and shutdown) and particulate matter emissions to 0.5 lb/MMBtu. Similarly, S.C. Regulation 61-62.5, Standard 4, Section IX limits the CMAP build up equipment to 20% opacity. Each of these limitations are based on the control of particulate matter emissions. Since CMAP build up emits little to no particulate matter, and the thermal oxidizer burns concentrated VOCs or natural gas, it is highly improbable that any violation of the applicable Rules limiting particulate matter and opacity would occur. Further, the uncontrolled particulate matter emission rate associated with firing natural gas would be well below the 100 ton/yr major source CAM Rule applicability threshold.

As indicated previously, the removal of the 39.5 ton/yr VOC limit from the CMAP production building eliminates the requirement of a CAM Plan for the CMAP build up air pollution abatement system building because the system will no longer be used to meet an emission limit. However, AVX will continue to operate the unit as required by the operating permit and use the CAM Rule as guidance for operation. In 40 CFR 64.4, the CAM Rule establishes the concept of presumptively acceptable monitoring approaches. This concept presumes that existing monitoring requirements specified by USEPA or permitting authorities for specific emission sources establishes acceptable monitoring approaches for other similar sources. Based on the system design, the AVX operating permit requires monitoring pressure drop across the adsorbers, temperature in the desorbers, and temperature in the thermal oxidizer to demonstrate effective VOC destruction. AVX also monitors the BAC density as prescribed by the manufacturer. New BAC density is 0.52 - 0.58 milligrams per 100 milliliters. When the BAC reaches 0.86 milligrams

per 100 milliliters it is replaced. The BAC density is measured once per quarter as it takes 3 to 4 years for new BAC to reach the end of its useful life. This life cycle time is expected to increase as the AVX VOC loading rate is trending downward.

5. Rationale for Selection of Indicator Ranges

On February 26, 2009, AVX conducted a performance test on the CMAP build up abatement system at the request of the South Carolina Department of Health and Environmental Quality. The potential VOC emission rate from eleven CMAP machines was simulated to challenge one adsorber/desorber and the thermal oxidizer. The operating permit requires that AVX monitor the following parameters and ranges:

Required Parameter	Required Range
Adsorption pressure drop	1.0 - 5.0" H ₂ O
Desorption temperature	350 - 650 deg F
Thermal oxidizer temperature	1400 - 1800 deg F

During the source test, the average pressure drop was 3.2" water, average desorption temperature was 420° F, and average thermal oxidizer temperature was 1500° F. All parameters were within their respective range requirement and the subsequent resulting control efficiency was greater than 99%. Based on these results, AVX proposes the permitted parameters and indicator range for proper operation of the CMAP build up abatement system.

6. Performance Criteria

Representative Data - Acquisition of representative data is assured by the system's existing Data Acquisition and Handling System (DAHS).

Quality Assurance and Control Procedures

Current procedures include daily inspections of:

- Adsorber inlet pressure
- Airlift blower pressure
- Adsorber hopper BAC level

- Fluidization appearance on trays
- Check all site glasses for BAC (adsorber, desorber, overflow)
- Desorber temperature profile
- Desorber electrical profile

Current procedures include quarterly inspection of:

- BAC density

Any maintenance performed (periodic or repair) on the system devices is documented and maintained onsite. The system is also equipped with parametric alarms.

Monitoring Frequency - As specified in the operating permit, the thermal oxidizer shall be equipped with a temperature gauge to continuously monitor the combustion zone temperature when operating. The thermal oxidizer combustion zone temperature is measured and recorded electronically every 15 seconds. The adsorption units shall each be equipped to monitor pressure drop. The desorption units shall each be equipped to monitor temperature. Each of the adsorption/desorption parameters are recorded daily when operating.

Data Collection Procedure - The thermal oxidizer temperature data is recorded in a Data Acquisition and Handling System. Daily recordings of adsorber/desorber pressure drop and temperature are recorded manually each day when operating.

Data Averaging Period - The thermal oxidizer combustion zone temperature averaging period is every 6-minutes.

7. Performance Test Data

As previously indicated, a source test was conducted on the CMAP build up VOC control system on February 26, 2009. The system successfully met the operating permit requirements. The air permit does not require regularly scheduled stack emissions testing for compliance demonstrations.

8. Implementation Plan

The parametric monitoring system are already installed and in operation and in compliance with the operating permit.

TABLE 1

**Compliance Assurance Monitoring Plan Summary
VOC Emissions From Adsorber/Desorber/Thermal Oxidizer
CMAP Build Up**

I. Background

A. Emissions Unit

Description: 24 CMAP Build Up Machines
Control: 2 – 5,000 cfm adsorber/desorbers
1 – 14,000 cfm adsorber/desorber
1 – 1.0 MMBtu/hr thermal oxidizer
Facility: AVX Corporation
Myrtle Beach, South Carolina

B. Applicable Regulation

Regulation No.: N/A
Regulated Pollutant: VOC
Emission Limit: N/A

II. Monitoring Approach

The key elements of the monitoring approach for PM compliance, including indicators to be monitored, indicator ranges, and performance criteria are presented below:

<u>Item</u>	<u>Description</u>
1. Indicator	1. Adsorber ΔP 2. Desorber Temperature 3. Thermal Oxidizer Temperature
2. Indicator Range	1. 1" – 5" H ₂ O 2. 350 – 650 degrees F 3. 1400 – 1800 degrees F
3. Performance Criteria	
a. Representative Data	40 CFR 60, Appendix B, PS-1
b. Verification of Operational Status	DAHS
c. Quality Assurance and Control Practices	Routine inspection and repair
d. Monitoring Frequency	Every 10-seconds
e. Averaging Period	Every 6-minutes
f. Data Collection Procedure	Continuously recorded in DAHS
f. Recordkeeping	Records are maintained on file (hard copy or electronic) for a period of 5 years
g. Reporting	Quarterly Emissions Reports Semi-annual Compliance Reports Annual Compliance Certification
h. Frequency of Reporting	Quarterly, Semi-annually, Annually

Attachment 4
Completed Daily Observation Sheet

Date:

2/8/13

EHS Daily Check

Inspector:

R Perkins

Department/Area	Control Device	Inspection Items	Reading
RMM	Farr Tenkay Dust Collector A Control Device ID: DC-A	Pressure drop 1.0"-5.0" H2O	2.0
	Farr Tenkay Dust Collector B Control Device ID: DC-B	Pressure drop 1.0"-5.0" H2O	2.0
	Farr Tenkay Dust Collector C Control Device ID: DC-C	Pressure drop 1.0"-5.0" H2O	OFF
MB1, Slip Mfg, Metals	All rooftop stacks	Any visible emission other than steam?	Yes <input type="radio"/> No <input checked="" type="radio"/>
		Any noted failures/malfunctions?	Yes <input type="radio"/> No <input checked="" type="radio"/>
MB2 Boiler Rm. Roof	MB2 Boiler Stack	Any visible emission other than steam?	Yes <input type="radio"/> No <input checked="" type="radio"/>
CMAP Support (MB2)	Spencer Jet Clean Separator A Control Device ID: MB2-BH	Pressure drop 1.0"-5.0" H2O Record if running	OFF
	CMAP Buildup (MB2) VOC Abatement System		
	Control Device ID: AD-2	Absorber # 2 Pressure Drop (1.0"-5.0")	2.1
	Control Device ID: AD-3	Absorber # 3 Pressure Drop (1.0"-5.0")	2.5
	Control Device ID: AD-4	Absorber # 4 Pressure Drop (1.0"-5.0")	1.3
	Control Device ID: AD-2	Desorber # 2 Mid-Bed Temp (350-500F)	381.2
	Control Device ID: AD-3	Desorber # 3 Mid-Bed Temp (350-500F)	401.9
	Control Device ID: AD-4	Desorber # 4 Mid-Bed Temp (350-500F)	407.1
	Control Device ID: TO-1	Thermal Oxidizer #1 (1400-1800 F)	1502
Thin Film (MB2)	Rotary Bed Scrubber System	Scrubber # 1 Pressure Drop (1.0"-3.0")	1.5
		Scrubber # 2 Pressure Drop (1.0"-3.0")	1.0
	Control Device ID: TFS	Scrubber # 1 pH (6.0-13.0 SU)	8.25
		Scrubber # 2 pH (6.0-13.0 SU)	8.56